

### ABSTRACT

The invention relates to a direct electrical drive (1) for a wheel set (30) of a vehicle, wherein the direct electrical drive (1) comprises a stator (7) and a rotor (3), with the rotor (3) being coupled mechanically with a wheel set shaft (11). The rotor (3) includes a cooling device. The cooling device includes cooling channels (22), an air inlet (37) and at least one fan (9), whereby the cooling channels (22) extend inside the rotor (3).